Configuring the HIM for Use as a Drive Recorder

With the May '04 release of HDS software version 1.012.014, the HDS can configure the Honda Interface Module (HIM) for use as a drive recorder. It's a great way to capture intermittent problems that are elusive or hard to duplicate. You can configure the HIM to start recording when a parameter exceeds a particular threshold voltage or value or when your customer presses the green **ENTER** button on the front of the unit. To configure the HIM as a drive recorder, here's what you do:

1. Connect the HDS to the 16P data link connector (DLC). Turn the ignition switch to ON (II). Turn on the HDS.
2. At the screen prompts, enter the VIN (if you're asked) and the odometer reading.
3. At the **Select Mode** screen, select **Honda Systems**. At the **System Selection Menu**, select **PGM FI**.
4. From the **Mode Menu**, select **Drive Recorder**, then wait for the prompt telling you to disconnect the HDS from the DLC. The HDS then directs you to connect the HIM to the DLC. When communication is established between the HIM and the vehicle, you see the green **1** light on the front of the HIM come on.
5. Connect the HIM to the HDS with the red communication cable (P/N REDCAT5E). When communication is established, you see the green **1** light and the yellow **2** light on the front of the HIM blink together.
6. Touch the green check mark (✓) in the lower right corner of the display screen after communication is established.

   NOTE: The HDS may state that the HIM software needs updating to be used as a drive recorder. If this happens, follow the screen prompts, and update the software.
7. When you see the drive recorder setup screen, select the trigger type, length, and trigger point for the snapshot. The trigger point is important, so don't forget to select it.

   NOTE: If you configure the HIM to take snapshots manually, tell your customer to press the green **ENTER** button on the front of the HIM when the symptom happens.
8. Touch the blue check mark (✓) on the display screen. The yellow **2** light on the front of the HIM starts to blink, then the green **1** light also starts to blink.
9. When you see a dialog box that states the configuration was successful, touch **OK**, and disconnect the HDS from the HIM. The HIM is now configured to take drive recorder snapshots.

Downloading Drive Recorder Snapshots to the HDS

After you've taken drive recorder snapshots with the Honda Interface Module (HIM), you'll need to download them to the HDS. Here's how you do it:

1. Connect the Honda Interface Module (HIM) to the 16P data link connector (DLC) or to a power adaptor.
2. Turn on the HDS. From the main screen, touch the open file folder icon on the right side of the display screen. This puts the HDS in its stand-alone mode. From the **Mode Menu**, select **Drive Recorder**. You see a dialog box asking if you want to download information from the HIM.
3. Connect the HIM to the HDS using the red communication cable (P/N REDCAT5E). Touch **YES** in the dialog box. As the HDS starts downloading the snapshots from the HIM, you see a status bar at the bottom of the screen. Wait for the download to complete (this could take awhile, depending on the number of snapshots). When it's done, you see a list of the downloaded snapshots.
4. Select the **+** box next to the VIN of the snapshot you want to see. Select the time you want to see, then touch the green check mark (✓) in the lower right corner of the screen. The HDS then displays the selected snapshot.

New Software for HDS: Version 1.014.006

During the week of October 4, 2004, all Honda dealerships were sent a new CD containing HDS software version 1.014.006. This new CD has a beige label (looks like cafe au lait) that reads "Honda Diagnostic System Installation Disk (VER 1.014.006), October 2004." Your system administrator should have this software already loaded onto the master server.

Here's some important info on 1.014.006:

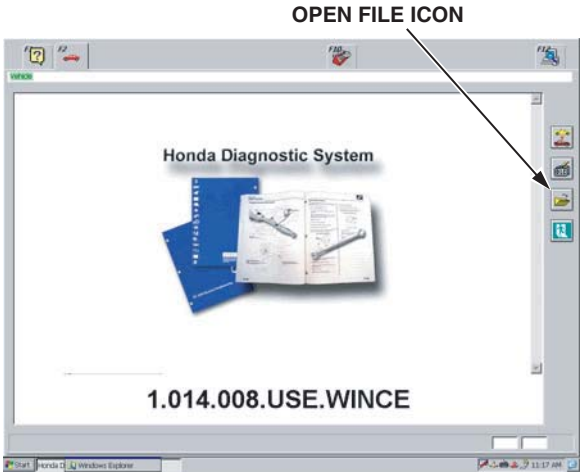
- System coverage has been added for all '05 Odysseys.
- The help screen text and icons have been updated.
- The EVAP System Function Test has been corrected.

Information No Longer Valid

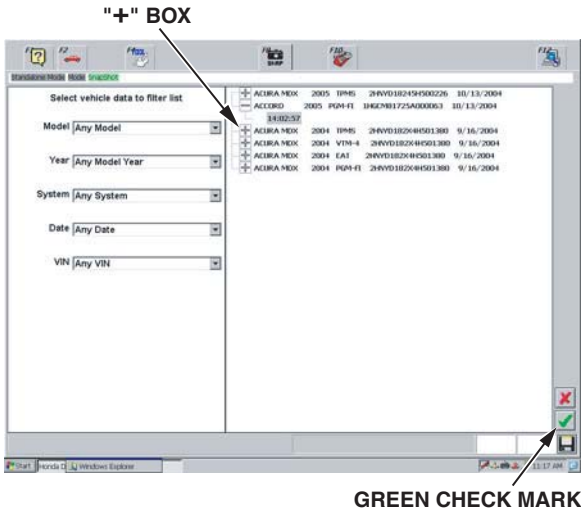
Sending HDS Snapshots to Tech Line

Need to send Tech Line some HDS snapshots? It's really a snap. Here's how:

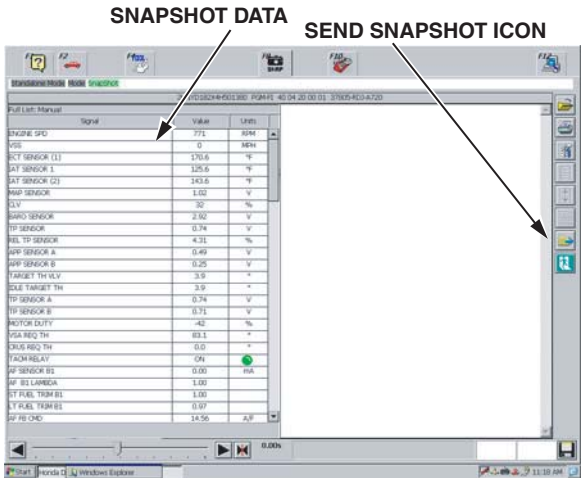
1. Plug the HDS into a networked docking station.
2. Turn on the HDS. From the main screen, touch the open file folder icon on the right side of the display screen. This puts the HDS in its stand-alone mode.



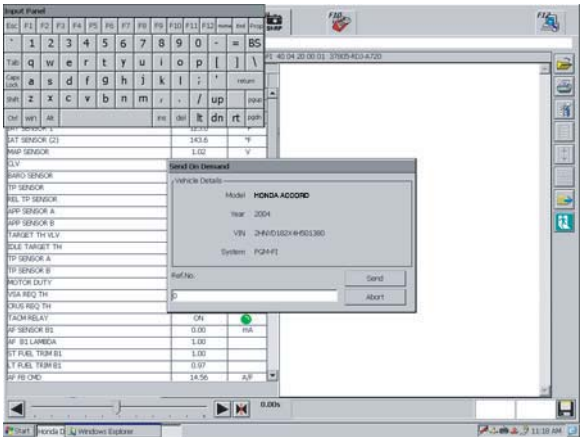
3. From the **Mode Menu**, select **Snapshot,** then select the **+** box next to the VIN that you want to see snapshots for. Select the time of the snapshot you want to see, then touch the green check mark (✓) in the lower right corner of the screen. You see the snapshot you selected.



4. Touch the send snapshot icon on the right side of the screen.



5. In the **Send On Demand** dialog box, enter the Tech Line reference number in the **Ref No.** box, and then touch **Send**. When you see the message **Data file transferred successfully**, you're done.



Hose-Pinching Pliers, *Not* Vise Grips for S/B 03-043

If you're doing the repair procedure in S/B 03-043, *Product Update: Intake Air Breather Pipe*, make sure you're using hose-pinching pliers, *not* vise grips to pinch off the coolant hoses leading to the breather pipe. Vise grips can tear the hose, causing leakage and potential engine failure. The illustration in step 1 of the repair procedure will be revised to better reflect hose-pinching pliers. If you need hose-pinching pliers, call the Honda Tool and Equipment Program at **888-424-6857**. Ask for T/N YA965.

Removing a Stubborn ATF Filler Bolt

NOTE: This article applies to '03–04 Accord V6s with A/T, '02–04 Odysseys, and '03–04 Pilots.

Got a vehicle in your shop with an ATF filler bolt that won't budge? Grab an extension, and attach a 17 mm socket to it. Place the socket over the bolt, and strike the end of the extension with a hammer. This compresses the sealing washer under the bolt, reducing the friction on the threads. If the bolt still won't budge, then you'll need to call in the heavy artillery and use an air wrench. If you do, be careful not to inflict any collateral damage on the case.

Slow Power Windows? Check Run Channel Friction

Got a '01–05 Civic in your shop with one or more power windows moving a tad on the slow side? The likely culprit is run channel friction. Power window motors and regulators rarely cause this problem; they simply raise and lower the glass like a jack. To check if the run channel is the problem, do this:

1. Refer to the Body section of the 2001–05 Civic S/M, and remove the two bolts that hold the glass to the regulator. (On ISIS, enter the keyword **DOOR GLASS,** and select **...Door Glass and Regulator Replacement...**, from the list.)
2. Check the run channel friction by raising and lowering the glass by hand.
   - If the glass does not raise and lower smoothly, go to step 3.
   - If the glass raises and lowers smoothly, compare the run channel friction to the run channel friction in a known-good vehicle. If the run channel friction is the same, then look for other possible causes.
3. Use hot, soapy water to clean the run channels, then retest.
   - If the glass now moves smoothly, reinstall the glass to the regulator.
   - If the glass doesn't move smoothly, go to step 4.
4. Use silicone or graphite to lubricate the run channels, then retest. Make sure you don't use oil-based lubricants; they attract dirt and grime.
   - If the glass now moves smoothly, reinstall the glass to the regulator.
   - If the glass still doesn't move smoothly, then replace the run channels, not the motor and regulator.
5. Repeat steps 1 thru 4 for any other power windows that move slowly.

Remanufactured Clamp Units Now Available for MATRIX H Key Cutting Machine

If your dealership's MATRIX H Key Cutting Machine suffers jaw damage from cutting all those sidewinder keys, here's some good news. The Honda Tool and Equipment Program now has a reman program that takes the hassle out of replacing and aligning the locking jaws. When you place an order, you'll get a remanufactured unit with the jaws already mounted and aligned. Just swap out the old clamp unit for the new one, and send the old one back. Here's how this works:

1. Call the Honda Tool and Equipment Program at **888-424-6857**, and order a reman clamp unit (P/N ILCMATRIXHCR). The price for each unit is **$120.00** plus applicable sales tax. Your order will be processed and, by next day, a reman clamp unit will be drop-shipped in a protective foam container to your dealership via UPS Ground.

2. When the reman clamp unit arrives, replace the old clamp unit. Make sure you save the protective foam container; you'll need it to return the old unit.
   - Remove the screw from the left end of the old clamp unit.
   - Turn the clamp unit lock lever to the left to unlock the clamp unit, then gently slide the unit off the clamp carriage dovetail from left to right.
   - Reinstall the screw on the old clamp unit.
   - Use a clean shop towel to remove any debris from the clamp carriage dovetail.
   - Remove the screw from the left end of the new clamp unit.
   - Gently slide the new clamp unit onto the clamp carriage dovetail from right to left.
   - Turn the clamp unit lock lever to the right to lock the new clamp unit in place.
   - Reinstall the screw on the new clamp unit.

3. Pack the old clamp unit in the protective foam container you saved. There's no special paperwork required, but make sure you include a business card or something with your dealership's name, address, and phone number on it.

4. Ship the old clamp unit via UPS Ground to this address:

   Sherise Parker
   Kaba Ilco Corporation
   400 Jefferys Road
   Rocky Mount, NC 27804

   NOTE: There is a core charge of **$576.00** if the old clamp unit does not arrive at this address within **10 business days** from the time you received your reman clamp unit. This charge gets debited to your balance forward account.

A/T Solenoid Replacement Criteria

NOTE: This article applies to '99–04 Accords, '01–04 Civics, '02–04 CR-Vs, '03–04 Elements, '99–04 Odysseys, and '03–04 Pilots.

The diagnostic procedures in our S/Ms were written before we had solenoid replacement data.

To cut down on unnecessary solenoid replacement, *don't* replace solenoids if any of these criteria are met:

- The odometer has more than **20,000 miles**.
- The vehicle has a reman A/T.
- The ATF is contaminated with friction material or metal.
- The axle seals are leaking or the differential carrier bearings are loose.
- The A/T makes grinding or whining noises.

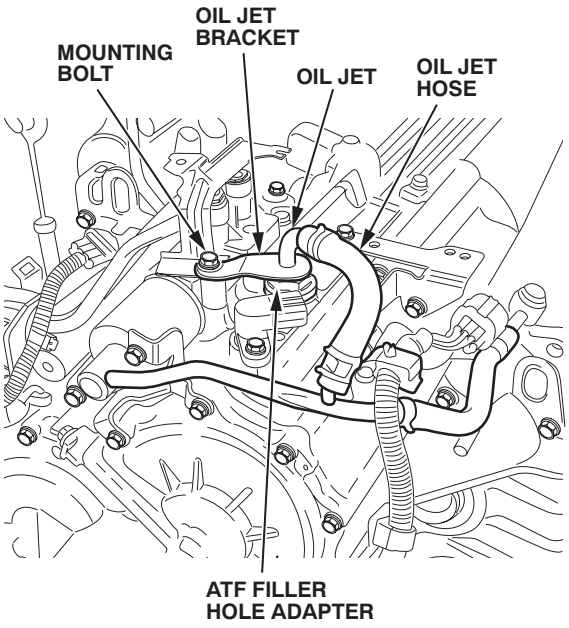
Replenishing ATF on Vehicles With A/T Oil Jet Kits

NOTE: This article applies to '03–04 Accord V6s, '02–04 Odysseys, and '03–04 Pilots with the A/T Oil Jet Kit (P/N 06250-PGH-305, H/C 7758931) installed. This kit gets installed when doing S/B 04-021, *Safety Recall: Automatic Transmission Second Gear Inspection*, or S/B 04-037, *Safety Recall: Accord V6 Automatic Transmission Second Gear Inspection.*

Need to refill or top off an A/T that's got the A/T Oil Jet Kit installed? It takes a little extra effort since the oil jet takes up the ATF filler hole. Here's how you do it:

1. Release the hose clamp, and carefully detach the oil jet hose from the oil jet. Be careful not to kink the hose or to pull on it; you could damage the hose. If the hose gets damaged, make sure you replace it.

   NOTE: Honda parts stock doesn't carry replacement oil jet hoses separately at this time. If you need an oil jet hose, you must order the entire oil jet kit.



2. Remove the mounting bolt from the oil jet bracket, and remove the oil jet from the ATF filler hole. Discard the oil jet O-ring.
3. Fill the A/T with Honda ATF-Z1.
4. Install a new O-ring (P/N 91301-P7W-003, H/C 6276539) on the oil jet, then reinstall the oil jet.
5. Reattach the oil jet hose so it's **34 mm** in from the end of the oil jet. Position the hose clamp so it's **7 mm** in from the end of the hose.
6. Torque the mounting bolt to **12 N·m (8.7 lb-ft)**.

Camera Fixture Retainer Knobs Now Available

NOTE: This article applies to '03–04 Accord V6s, '02–04 Odysseys, and '03–04 Pilots

Need a replacement retainer knob to hold the Canon A75 digital camera to the fixture when doing S/B 04-021, *Safety Recall: Automatic Transmission Second Gear Inspection*, or S/B 04-037, *Safety Recall: Accord V6 Automatic Transmission Second Gear Inspection*? Honda parts stock now has these knobs available. Order P/N 07AAB-PGHA300, H/C 7951916.

Groan, Boink, or Twang When Accelerating

Are '05 Odyssey owners complaining of a groan, a boink, or a twang when accelerating? The VSA could be the reason.

In these models, the VSA does a self-check after every ignition cycle. At about **12 mph**, the VSA pump motor comes on for **28 milliseconds**. You may hear a low groan. At **25 mph**, the VSA valve comes on for **2.5 seconds**. You may hear a faint boink or twang when it does.

Vehicle owners will most likely hear only the pump motor groan, since the valve noise is really hard to hear. You can check if these noises are coming from the VSA by hooking up a STEELMAN® ChassisEAR™ diagnostic tool (T/N JSP-SM06600) to the brake lines at the VSA modulator. If the VSA is the source, these noises are just a normal characteristic of the vehicle.

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Squeezing the Most Pennies From Your Fuel Economy Dollar

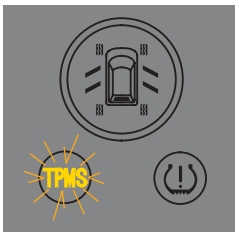
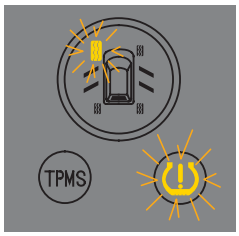
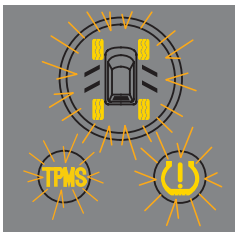
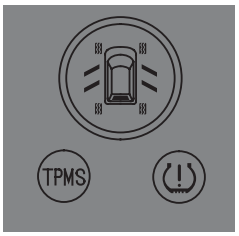
Oil prices are climbing, and that can only mean some painful price hikes at the fuel pump. These days, fuel economy is a serious concern for many drivers. But squeezing the most pennies from one's fuel economy dollar is no easy task. It takes some skillful driving and a vehicle that's properly maintained.

Here are some helpful tips to keep in mind and to share with your customers:

- **Set Correct Tire Pressures** - Use an accurate tire gauge to set the tire pressures to the recommended values listed on the driver's doorjamb sticker. These values are the recommended cold inflation pressures that are the best compromise for ride quality, steering feel, handling, and fuel economy. When replacing tires, always go with OEM tires, they're optimized for low rolling resistance.
- **Use the Correct Engine Oil** - A higher viscosity engine oil increases internal engine drag, and that reduces fuel mileage. Always use the recommended engine oil for your vehicle.
- **Accelerate Moderately and Smoothly** - Avoid pressing the accelerator pedal excessively. Hard acceleration burns a lot of fuel. Very slow acceleration keeps the transmission in its lower gears too long, which also increases fuel consumption. Moderate, smooth acceleration gives the best fuel economy. If the vehicle has an M/T, you can boost your fuel economy by upshifting as early as possible.
- **Avoid Stop-and-Go Driving** - Anticipate traffic signals to keep the vehicle's momentum going. Avoid unnecessary stops and starts. Don't tailgate; hugging the bumper in front of you forces you to make the same stops and starts as the vehicle that bumper's bolted to. Use the cruise control as much as possible to keep your speed consistent.
- **Minimize Braking** - Every time you brake while driving, you have to accelerate again, and that uses fuel. When decelerating, take your foot off of the accelerator pedal or use light braking. In hybrid vehicles, decelerating or light braking charges up the IMA battery so the kinetic energy can be used again when accelerating.
- **Use the ECON Button (Insight and Civic Hybrid models only)** - Make use of the **ECON** button. When you're in ECON mode, and with the A/C running, the Auto Idle Stop feature is active.
- **Use A/C Sparingly** - The engine works harder when the A/C is running, and that reduces your fuel mileage. Turn on the A/C only when you really need it. If the vehicle has climate control, select the warmest temperature that's still comfortable.
- **Reduce Speed** - Aerodynamic drag has a big effect on fuel mileage at speeds above **45 mph**. Reduce your speed and you reduce the drag. Trailers, cartop carriers, roof racks, and bike racks are also big contributors to increased drag.
- **Reduce Vehicle Weight** - Unnecessary items in the vehicle add weight. That makes the engine work harder and use more fuel. Remove the stuff you don't need from the passenger compartment, trunk, or cargo area.
- **Use a Block Heater in Cold Weather** - As the air temperature drops, more fuel is wasted heating up the engine to its normal operating temperature after a cold start, and the engine oil is thicker, increasing internal engine drag. Also, at temperatures below **40° to 50°F**, fuel doesn't vaporize properly, so more of it must be used for the engine to run properly during warm-up. A block heater helps keep both the engine and the engine oil warm and reduces the extra fuel needed at colder temperatures.
- **Avoid Short Trips If Possible** - The engine uses a lot of fuel to warm up to its normal operating temperature (about **180°F**), and it has to deal with higher internal friction before it does. The shorter the trip, the more fuel that's wasted warming up the engine and is lost to higher internal engine friction. For short trips, try walking or bicycling if you can. If you need to drive, keep in mind your fuel economy will drop quite a bit. This is especially true if you're making those short trips on a cold day or if you're making them on a hot day and you're running the A/C to quickly cool down the vehicle. Such conditions can easily reduce your fuel economy by more than **25 percent**.

TPMS Troubleshooting at a Glance

The '05 Pilot comes with the Tire Pressure Monitoring System (TPMS). Troubleshooting this system can be a little tricky. Misdiagnose a symptom, and you could wind up replacing parts that didn't need replacement. Here's a handy guide to help you.

				
Condition	TPMS indicator on	Low tire pressure indicator on with one or more tire indicators on	All indicators on (TPMS, low tire pressure, all tire indicators)	All indicators off (TPMS, low tire pressure, all tire indicators). Customer complains all indicators come on and go off with ignition switch turned to ON (II).
Usual Cause	Fuse issue	Tire is low on air, leaking air, or both.	TPMS receiver is in factory setting.	Tire is low on air, leaking air, or both.
First Repair Step	Replace fuse.	Make sure ignition switch is in LOCK (0). Inflate tire to proper pressure. Check for leakage. Repair leak per S/M.	Memorize tire pressure sensor IDs with HDS.	Check each tire for proper inflation, leaks, or both. Do not replace any TPMS components.
Condition Following First Repair Step	No change to TPMS indicator	Turn ignition switch to ON (II). Check if indicators go off within 1 minute.	No change to indicators	Test-drive vehicle for 10 minutes. Make sure all indicators are off.
Judgement	More analysis needed. Refer to S/M.	More analysis needed. Refer to S/M.	More analysis needed. Refer to S/M.	TPMS is working OK. Issue resolved. If any indicators come on, use this chart, and refer to S/M if needed.

Pinging or Buzzing Between 1,500 and 2,500 RPM

Got a '03–04 Accord V6 in your shop that pings, buzzes, or whistles under load with the engine running at 1,500 to 2,500 rpm? The culprit could be the intermediate shaft bearing heat shield. This noise can change with engine temperature and may be intermittent. Sometimes, you can hear this noise only when the engine is cold.

If you suspect the intermediate shaft heat shield is making all the racket, remove it, and test-drive the vehicle. If the noise goes away, replace the heat shield. If you hear the noise even without the heat shield, then hook up a STEELMAN® ChassisEAR™ diagnostic tool (P/N JSP-SM06600) to pinpoint the source. To keep from damaging the intermediate shaft bearing, don't drive the vehicle without the heat shield for more than a few minutes.

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2005 V6 Models Come With New, Smaller Oil Filters

Honda has switched over to a new smaller style of oil filter (65 mm diameter) for all '05 models with V6 engines. These new smaller oil filters have a torque spec of **12 N·m (8.7 lb-ft)**.

This smaller style of oil filter is also the replacement filter for earlier Honda models except Insights, Passports, and S2000s.

Tips From Training: Become an AYES Mentor

Ever heard of AYES? If you haven't, it stands for Automotive Youth Education System. It's a program designed to provide your dealership with qualified entry-level service techs. AYES works with highly qualified high schools (all participating schools go through a rigorous certification process) and a dealership mentor to bring in talent that our industry needs to survive.

So, how can you help? If you're a service tech, consider becoming an AYES mentor. You'll be rewarded with the opportunity to help a young person learn about automotive technology, and you can qualify for AYES mentor points in the Honda Service & Parts Professionals Program. If you're dealership personnel, offer to serve on the advisory committee. For more information about AYES, including school locations, visit their website at *www.ayes.org*.

During October and November, many AYES schools are identifying training partners and establishing their priorities for the upcoming year. The time to act is now!

Obsolete
Obsolete
Obsolete

Use Oil Deflector When Changing Oil Filter

When you're removing the oil filter on a '98–02 Accord L4, oil from the filter and the oil passage can dribble onto the flexible exhaust joint. Not only is this flexible joint a bear to clean (oil gets into the nooks and crannies of all that braiding), your customer will be smelling burnt oil for hundreds of miles.

The Honda Tool and Equipment Program has an oil deflector that prevents this. Just slip it over the flexible joint and any dribbling from the oil filter or oil passage runs down the deflector and not on the joint. To order, call the Honda Tool and Equipment Program at **888-424-8657**. Ask for T/N VSB02C000020.

AUTOMOTIVE Youth Educational Systems YES ®

HONDA ServiceNews

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